

REMARKS

Applicants acknowledge receipt of the office action dated October 3, 2003, in which the Examiner again rejected all claims pending in the application. Applicants also acknowledge the interview granted by the Examiner on October 30, 2003, in which all claims were discussed, but no agreement regarding allowability was reached. Applicants have again amended the claims and respectfully traverse the rejections for the following reasons.

Objections to the Drawings

The Examiner objected to the drawings on the grounds that various features that are recited in the claims are not shown in the figures. Applicants respectfully submit that the original drawings contain every feature that is currently recited in the claims. Replacement drawings are submitted herewith via a Proposed Drawing Amendment that is appended hereto. In the replacement drawings, Figures 4-6 are presented more clearly and have been amended, along with Figure 1 to include new reference numerals indicating various features that are claimed in the present case. In addition, four paragraphs have been added to the specification, by which the new reference numerals are incorporated into the specification along with their corresponding terms from the claims. Applicants respectfully submit that, because all of the concepts now added via amendment were disclosed in the original application, the foregoing amendments do not constitute new matter.

In addition, Applicants have again attached hereto, as Exhibit "A", printed copies of original Figure 1 and amended Figures 5 and 6 to which color-coded labels have been added to indicate the various claim elements that are shown therein. In the Exhibit A, each limitation recited in the claims is identified with annotations that have been added to the Figure. Exhibit A is merely intended to facilitate the Examiner's review and is not intended as a *Drawing Amendment*.

Rejection under 35 U.S.C. § 103

In rejecting claims 2, 4, and 14-24¹ as unpatentable over Stewart et al ('496) in view of Cerutti et al, the Examiner asserts that Stewart discloses a multistory building meeting the limitations of claims 15 and 20 with the exception of using poured-in-place concrete construction techniques. Applicants respectfully submit that this is in error for the reasons set out below.

¹ The Examiner indicated that claims 2, 4, and 15-24 were rejected, but it appears that the rejection was intended to include claim 14.

The Examiner states, beginning in the last line on page 3 of the Office Action, that Stewart discloses “first and third tunnels each having four parking spaces with a length dimension that is wider than the drive aisle; the second and fourth tunnels each set [*sic*] having two parking spaces with a length that is less than the first length.” Applicants do not understand the basis for this statement. It is not clear where (in Figure 14 of Stewart or elsewhere) the alleged “four parking spaces” and “two parking spaces” occur.

Regardless, Applicants submit that it is immaterial, as Stewart does not disclose or suggest a parking structure that meets the requirements of the claims. In particular, Applicants have amended claims 15 and 20 to explicitly recite that the parking spaces are configured “such that a set of three adjacent tunnels includes at least four parking spaces.” This feature is clearly shown in the original drawings and described in the specification as filed.² Furthermore, this feature allows the present invention to achieve a significant improvement over the art. Because the “first walls” are constructed so as to *span* [lengthwise] a parking space, rather than defining a parking space, three parking spaces can be fit into the width of only two tunnels. Depending on how the invention is implemented, these additional spaces result in a 20-50% increase in the number of spaces that can be formed as compared to conventional tunnel-formed garages of the same size.

Equally importantly, this improvement can be realized without requiring columns or a transfer deck, although such could be present if desired.

Stewart does not disclose or suggest a substructure comprised of tunnels in which some of the walls span [lengthwise] a parking space. Indeed, nothing in Stewart teaches or suggestion any deviation from the conventional construction of parking decks. Stewart provides for supporting the vertical load of the superstructure *by including a plurality of perimeter columns 46 and a plurality of interior columns 47*. Regarding structure, Stewart teaches:

Alternatively, or in addition to the tunnel form methods, the building complex 20 may be constructed of plural vertically extending columns 46, FIG. 2, about the perimeter of the complex and interior columns 47, all of which support the floors or levels 24, 26, 28 etc. above the level 22. (col. 3, l. 64 to col. 4, l. 1).

² On the attached color-coded sheets, the first walls are indicate by yellow highlighting, the drive aisle opening is indicated by light blue highlighting, and the advantageous parking space configuration results from the present invention is indicated by orange highlighting.

Stewart shows columns in Figures 2-5 and 7-23 and makes no mention of the effect that the use of columns will have on the cost and construction of the building. Similarly, at col. 11, ll. 18-23, Stewart teaches:

The construction of the building complexes 20, 200, 300, 400 and 500 may be carried out using architectural engineering practices known to those skilled in the art and by the use of conventional construction materials and components.

Stewart teaches no advances in the state of the art of building construction and clearly gives no guidance regarding cost or mechanics. When Stewart wishes to create a space that is larger than a tunnel width, he supplies the necessary support by using conventional columns. Thus, specifically, Stewart does not teach or suggest a tunnel-based construction in which the tunnels walls are configured such that the space defined by the structure is not limited to a tunnel configuration.

Even more specifically, Stewart does not teach or suggest placing three parking spaces in the space of two tunnels such that the middle space is centered under a tunnel wall, as required by amended claims 18-19 and 23-24.

In contrast, Applicants have invented a method for forming a parking substructure that uses a tunnel-forming technique that does not require supplemental columns and yet allows for a more efficient spacing of automobiles within the parking structure than would be possible using conventional tunnel-building techniques. This is a breakthrough in the state of the art because the standard desired width of tunnels for living quarters is not an efficient width for parking spaces. As described in the original specification, the disparity between the desired wall spacings in the substructure and superstructure formerly could only be overcome by inclusion of an expensive "transfer deck" between the substructure and superstructure. The present invention advances the art, therefore, by making possible a desirable spacing in both the substructure and superstructure without necessitating a transfer deck. Nothing in the art of record teaches or suggests the claimed invention.

Conclusion

Applicants appreciate the effort the Examiner has invested in the present case.

For all of the reasons set out above, applicants submit that claims 15 and 20, as well as the claims that depend from them, are allowable over the art of record. Applicants therefore request that the Examiner enter the amendment and withdraw the rejection. If the Examiner has any

questions or comments, or would like to suggest any further amendments, he is encouraged to telephone the undersigned at (713) 238-8043.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Marcella D. Watkins", written over a horizontal line.

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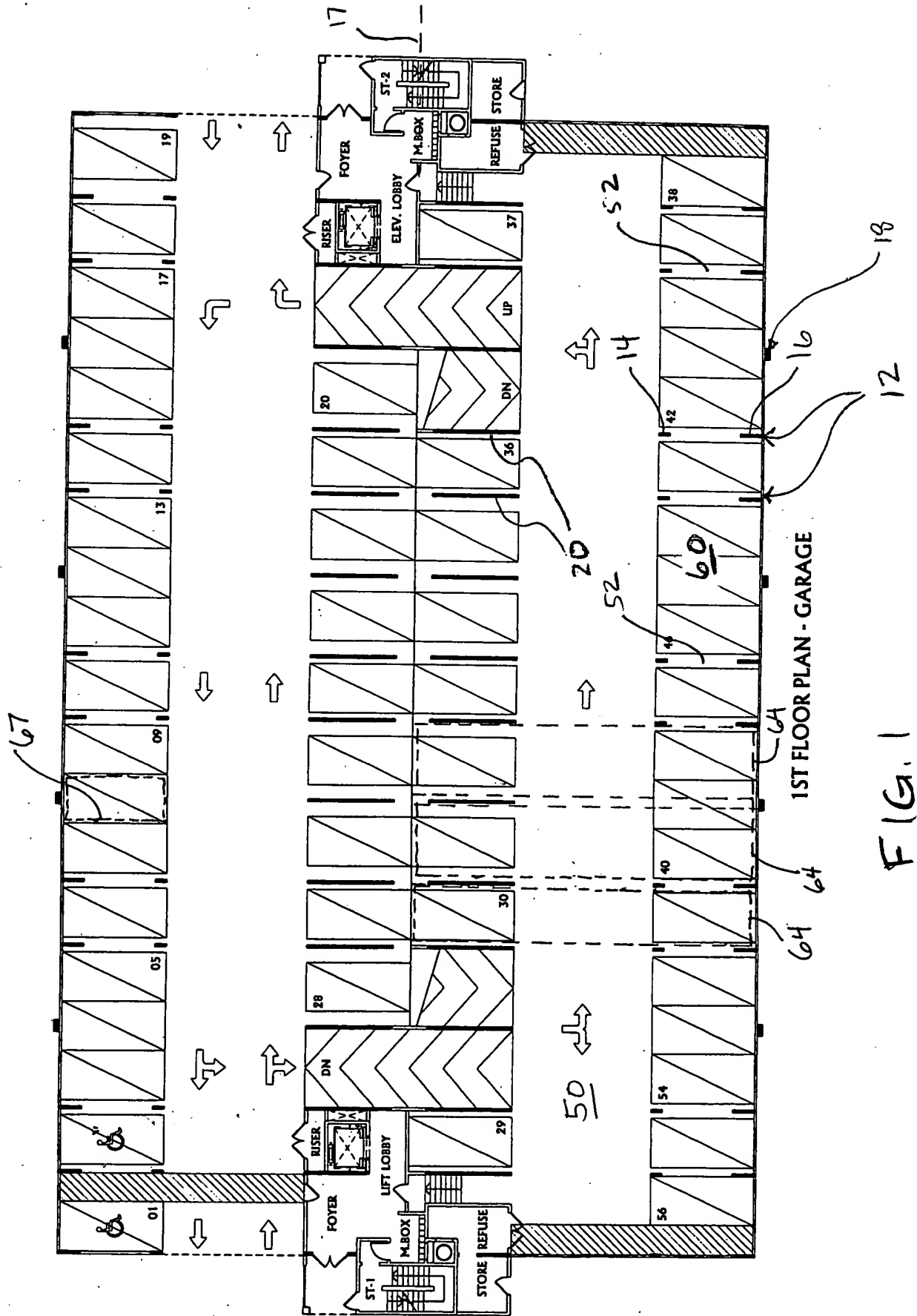


FIG. 1